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# Met & Unmet Need to Quit Smoking – A Need Assessment for Smoking Cessation Services

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## ABSTRACT

Chronic non-communicable diseases are the major threat to the health of population in developing countries. Tobacco smoking is one of the preventable underlying factors responsible for this group of diseases. Pakistan faces a higher prevalence of smoking despite the fact that masses are well aware about the ill health effects arising from smoking, thus leading to high unmet need for cessation of smoking. The current community based study on three hundred & twenty subjects looked into the situation unmet need & determinants for higher level of unmet need. The overall prevalence of current smoking in both genders was 49%. There was however no significant relation between gender & smoking ( $p=0.28$ ). The met need to quit smoking was 21.5% while unmet need to quit smoking was computed as 26.15%. The reasons for not being able to quit smoking were that smokers were of the opinion that they could fully control their smoking habits in future (28.6%;  $p=0.08$ ), smokers were unaware about smoking cessation services (54.4%;  $p=0.02$ ), lack of training to health care providers for imparting counseling services (37.2%;  $p=0.05$ ), the subjects expressed need to establish locally based services with community based smoking cessation advisors (78.6%;  $p=0.01$ ). The study concluded that in presence of high motivation among smokers to quit smoking, there is urgent need to provide appropriate smoking cessation services to the target population.

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## Introduction

The non-communicable diseases are now days a major public health issue in developed as well as in developing countries. World Health Organization in year 2002 reported that as population is aging, the non-communicable problems are emerging as strong enemies of health throughout the world in general & in south Asian countries in particular [1]. Hypertension & cardiovascular diseases were declared as major and growing contributors to mortality and disability in South Asia [2]. Similarly, chronic obstructive airway diseases (emphysema and chronic bronchitis) and asthma, resulting from indoor and outdoor air pollution, account for a large proportion of the burden of chronic respiratory diseases [3]. Cancers were also reported to be at higher rates in Indo-Pakistan [4]. During the end of previous century, many countries had already conducted researches to find out the potential risk factors & determinants for this group of diseases. As a result cigarette smoking was found as one of the modifiable risk factor responsible for rapid emergence of this group of diseases. According to World Health Organization (WHO), smoking is currently responsible for the death of one in ten adults worldwide [5]. It causes about 1 in every 5 deaths in the western countries each year [6]. It is the main preventable cause of death and illness in the United States. The situation is more serious in developing countries especially in Eastern Mediterranean countries where approximately 1,200 children are reported to start smoking everyday [7].

In Pakistan, it is estimated that the prevalence of tobacco smoking is 36% in males and 9% in females [8]. Among young adults especially the university students in Pakistan, the prevalence of smoking is 15%, the majority being male smokers [9]. The World Health Organization's Framework Convention on Tobacco Control (WHO-FCTC) was the first ever treaty negotiated & developed by W.H.O in response to the globalization of the tobacco epidemic [10]. Still, it is estimated that in Asian countries including Pakistan, the prevalence of tobacco smoking is very high in both genders [11]. Therefore it seems a dire need for looking into the determinants of smoking as a whole & to see whether there is some room for the improvement on the part of the smoking cessation services in our country.

### Objectives:

1. To determine the frequency of cigarette smoking in the study population.
2. To estimate the met & unmet need of cigarette smoking among study population.

### Material & Methods

#### Study Design & Setting

It was a community based cross sectional study conducted in Taluka Latifabad, City & Qasimabad in district Hyderabad in Sind province of Pakistan.

**Duration of Study:** The data was collected for the duration of three months i.e. from July 2014 to September 2014.

#### Study Subjects

The study was performed on a sample of 320 persons including 256 males & 64 females, keeping in view the Pakistan's prevalence data for smoking among males & females

[11]. The subjects were enrolled in the study through convenience sampling technique. The study subjects belonged to age group 15-65 years, related to all prevalent ethnic groups. No distinction was made on the basis of educational or professional background while collecting the data.

Data Collection Tool

For collection of data, a standard designed questionnaire was used including the close ended as well as open ended questions. All types of smoking (cigarettes, cigar, beeri, hookah etc) were included in the study. The subjects using smokeless tobacco e.g. chewing tobacco were excluded from the study. The demographic data was collected by close ended questions while open ended questions were asked in order to get perceptions & views of respondents regarding cigarette smoking services available in our set up.

Data Analysis

The variables of interest were age, gender, religion, smoking status (current smoking or previously smoking), and motivation to quit smoking, reasons for willingness to quit smoking, views about smoking cessation services available in our set up. The data was entered in SPSS version 16.0 & the frequencies were calculated in terms of percentages; the associations of qualitative variables were analyzed by applying Chi-square test; the continuous variables were analyzed by computing means & standard deviations. The p-value of  $\leq 0.05$  was taken as the level of statistical significance.

Results

There were 256 (80%) males & 64 (20%) females among total 320 participants interviewed. There was males' preponderance among smokers (52.7% males in comparison to 45.3% females). The overall prevalence of current smoking in both genders thus comes out to be 49%. There was however no significant relation between gender & smoking ( $p=0.28$ ). The youngest smoker recorded in the study was of age 15.5 years & the highest age recorded was 64.4 years. Among 164 current smokers in both genders the mean age of subjects was  $33.5 \pm 1.2$  years. Highest number of current smokers (57.8%) was found in age group 26-35 years (Chart No: 1). Among 164 current smokers in both genders, 130 (40.6%) wanted to quit smoking; while 59.4% argued in favor of continuing smoking due to various reasons. Among 156 currently non-smokers, forty five were those who were previously smokers & they quit smoking at some stage. Among 209 previously smokers, 45 have quit smoking (Chart No: 2); therefore the met need to quit smoking comes out to be 21.5%. Among total 164 currently smokers, 130 subjects were motivated to quit smoking at the time of interview but 34 among them didn't find ways to quit smoking (Chart No: 3); the unmet need to quit smoking therefore came out to be 26.15%. The 16.6% persons belonging to unmet need group had availed smoking cessation services / clinics for the varying periods of 3-6 months; while another 10.6% subjects were still availing such services. Reasons for desiring to quit smoking was that smoking was bad for their health (62.8%,  $p= 0.00$ ), pressure from family (78.04%;  $p=0.12$ ), economic impact (61.4%;  $p= 0.05$ ), need will-power (60.4%; 0.06) & social stigmas (31.7%;  $p=0.07$ ). The reasons for not being able to quit smoking are that they didn't know about such services (54.4% ;  $p=0.02$ ), lack of availability of services (40.4% ;  $p=0.04$ ), health care providers don't know the actual methods of giving services (37.2%;  $p=0.05$ ), need to establish locally based services with community based smoking cessation advisors (78.6% ;  $p=0.01$ ), health care providers find no time to help counsel on this topic (61.2% ; 0.02) & smokers were of the opinion that they could fully control their smoking habits in future (28.6%;  $p=0.08$ ) etc.

There were more subjects belonging to young age group who wanted to quit smoking due to variety of reasons (54.7% in age up to 35 years as against 45.3% in older age group). There was no association seen between age of smokers & desire to quit smoking ( $p=0.54$ ). But the unavailability /insufficiency of such services was the most complained about reason for not being able to quit in younger age group ( $p=0.03$ ). Finally, there was no association observed between desire to quit smoking & religion ( $p= 0.06$ ).

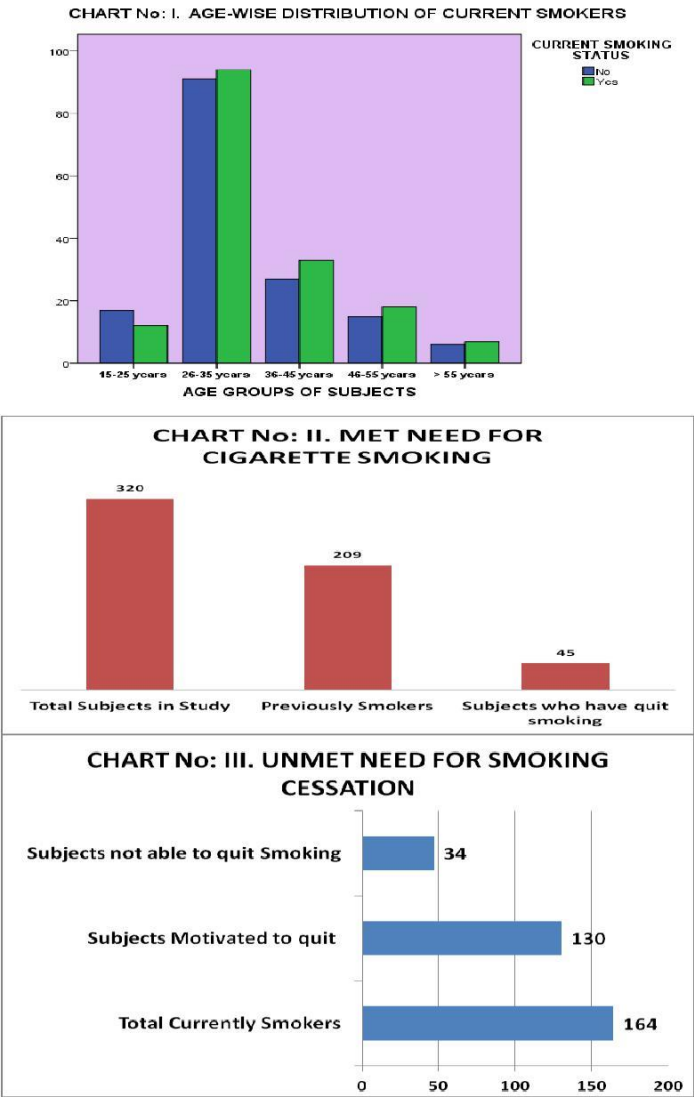


Table No I. Reasons for desiring to quit smoking among current smokers

S.No:	REASONS FOR DESIRE TO QUIT SMOKING	%
1.	Persuasion by families.	78.04%
2.	Hazardous for health.	62.8%
3.	Economic burden.	61.4%
4.	Lack of will power.	60.4%
5.	Socially stigmatization.	31.7%

Table No II. Perceptions about smoking cessation services

S.No:	PERCEPTIONS	%
1.	There is need to establish locally based services with community based smoking cessation advisors.	78.6%
2.	Heath care providers have no time to counsel on this issue.	61.2%
3.	Didn't know about such services.	54.4%
4.	Lack of availability of services.	40.4%
5.	Health care providers don't know the actual methods of giving counseling services.	37.2%

## Discussion

Prevalence of smoking, among male as well as females is the percentage of men /women ages 15 and over who smoke any form of tobacco, including cigarettes, cigars, and pipes, and excluding smokeless tobacco.[12]. The data analysis reveals an unexpectedly higher cumulative prevalence of cigarette smoking in the study population (49%). This is in contrast to the previous data of 24.5% in both genders [8]. Previously, smoking prevalence among Bangladeshi men had been reported at the highest (49%); even higher than that among Pakistanis (28%), Indians (19%), or white men in the UK (29%) [13]. This throws light on the need for some counseling programs for the masses in developing countries to reduce prevalence of this single most common determinant of illness. In Asian countries, the situation is now changing as more & more teenagers from these communities are increasingly taking up smoking [14]. A study on hookah smoking revealed that the average age of study participants was 22 years, 57% were males, and 72% were not cigarette smokers [15]. Our study found the mean age of currently smokers as  $33.5 \pm 1.2$  years & 57.8% of them were of the age group 26-35 years (Chart No: I). This was endorsed by another study that the tobacco smoking rates among Asian young men is among one of the highest in the world [16]. As far as smoking was concerned, there was males preponderance i.e. 52.7% males in comparison to 45.3% females indicating that prevalence of smoking was alarmingly high among females too; it again highlights the need for focusing on both genders while working on some cigarette smoking preventive program because as a risk factor, females have been reported at higher risk to develop the chronic diseases resulting from smoking [17]. However, it has been seen that men in contrast to women have higher smoking cessation rates at all follow-ups of smoking control programs. This unveiled a compelling need for additional research specifically aimed at elucidating the relation between gender and abstinence from smoking in special circumstances of higher magnitude and consistency of the gender differential, working in synergy with an inability to account for it [18].

The met need for smoking cessation was found to be 21.5%. Many researchers have analyzed that smokers with higher levels of intrinsic concerns about health and desire for self-control relative to extrinsic motivating factors like social influences were more likely to achieve abstinence from smoking[19]. A large part of the motivated persons who were ready to quit smoking (79.3%), were fully aware about hazardous effects of smoking on their health (62.8%;  $p=0.00$ ); even more concerned than the economic burden of smoking on them (61.4%;  $p=0.05$ ). Contrasting to this a very recent data collected from few developing countries revealed that 10% of the smokers were of the opinion that smoking was definitely not harmful to their health[20]. It shows that our population is quite aware & it's the ripe time to offer them suitable services to help them quit smoking.

The level of motivation among currently smokers was high (79.3%), but non-reliance on will-power (60.4%) was resulting in still lacking in the consistency of their decision. A similar study revealed that of the current smokers, 46% had tried at least once in their life to quit smoking without any success. [21]. Here again need for consistent service support arises. This also throws light on dire need for continuous counseling for smokers that helps them quit smoking. Consistent with the findings from other countries, the longest duration of previous quit attempts were associated with successful smoking cessation [19]. It has been documented that stops-smoking-services uptake plays a

good enough role as being a key part of tobacco control and health imparting policies both at local and national level [22]. In this regard the role of care givers may not be underestimated. We found care providers not knowing the actual methods of giving services (37.2%;  $p=0.05$ ); the same findings were also endorsed in another study by Rozi S et al. [23]. Khan FM et al too revealed in their research that nearly 96% of the subjects thought that health professionals should have specific training on how to support patients who wanted to quit smoking [24]. Social stigmas had also been seen to positively influence the smoking cessation attempts ( $p=0.07$ ); an increase in the social unacceptability of smoking has dramatically decreased tobacco use in the developing countries like U.S.A [25]. The socially motivated individuals are the most effective targets on whom the smoking control strategies may be applied. This was highlighted by increased need expressed by current smokers to establish locally based services with community based smoking cessation advisors (78.6%;  $p=0.01$ ). Begh Rachna A et al also cited that outreach community workers successfully expanded the smoking cessation services with fruitful impacts [26]. According to a self-report survey conducted on general practitioners, the training imparted to them increased the provision of quit-smoking advices (Odds ratio 1.56) by enhancing their ability and intention of providing smoking cessation care & readily involving the community volunteers in their service domain [27].

## Conclusions

Smoking is the biggest single preventable cause of ill health due to non-communicable diseases, therefore stopping smoking should be a public health priority. Owing to higher prevalence of this habit in younger age among both genders, there is dire need to control it in our communities. There is no lacking of motivation to quit smoking; the target population necessitate to have cessation services in their reach besides awareness about provision of such services; moreover the compliance of smoking cessation services may be increased by imparting smoking cessation training to care providers.

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